

Application No. 10/078,816

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Reply dated 28 March 2006

Responsive to Office Action mailed on 27 January 2006

AMENDMENT TO THE CLAIMS

The following complete set of claims replaces the previous set of claims.

Claims 1-20 (Cancelled)

21. (New) A disposable diaper comprising:
 - a liquid pervious topsheet;
 - a liquid impervious backsheet;
 - an absorbent core positioned between the topsheet and the backsheet; and
 - a dehydration indicator comprising a chemical indicating composition providing a visible signal indicative of a level of dehydration in response to an ionic strength of urine exuded into the diaper by a wearer, the dehydration indicator further comprising an alphanumeric character indicative of the level of dehydration.
22. (New) The disposable diaper of Claim 21 wherein the visible signal is provided only when the ionic strength exceeds a predetermined threshold.
23. (New) The disposable diaper of Claim 22 wherein the dehydration indicator further comprises a translucent cover masking the signal when the ionic strength is below the threshold, the signal becoming visible through the cover when the ionic strength exceeds the threshold.
24. (New) The disposable diaper of Claim 22 wherein the dehydration indicator comprises a second chemical indicating composition providing a second visible signal only when the ionic strength exceeds a second predetermined threshold.
25. (New) The disposable diaper of Claim 24 wherein the visible signals have different colors, different shapes, or both different colors and different shapes.

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26. (New) The disposable diaper of Claim 21 wherein the indicating composition comprises nitrilo-tris-(methylenephosphonic acid), 2-(N-morpholino)-ethanesulfonic acid, bis-(aminoethyl-)glycol ether N,N,N',N'-tetraacetic acid, maleic anhydride/methylvinylether copolymer in its free acid form, ethyleneglycol-bis[aminoethyl ether] tetraacetic acid, or combinations thereof.
27. (New) The disposable diaper of Claim 26 wherein the indicating composition further comprises bromothymol blue.
28. (New) The disposable diaper of Claim 21 wherein the visible signal appears as a colored shape juxtaposed with the alphanumeric character.
29. (New) The disposable diaper of Claim 21 wherein the dehydration indicator further comprises a colored zone juxtaposed with the alphanumeric character.
30. (New) The disposable diaper of Claim 29 wherein the dehydration indicator comprises a second colored zone juxtaposed with a second alphanumeric character, the colored zones and alphanumeric characters together forming a color key for the visible signal.
31. (New) The disposable diaper of Claim 21 wherein the dehydration indicator comprises at least a second alphanumeric character, the alphanumeric characters together forming a word descriptive of the level of dehydration.
32. (New) The disposable diaper of Claim 21 wherein the dehydration indicator comprises a second chemical indicating composition providing a second visible signal indicative of a second level of dehydration in response to the ionic strength.
33. (New) The disposable diaper of Claim 32 wherein the visible signals have different colors, different shapes, or both different colors and different shapes.

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34. (New) The disposable diaper of Claim 21 wherein the dehydration indicator is affixed to the topsheet.
35. (New) The disposable diaper of Claim 21 wherein the chemical indicating composition is covered by a semipermeable membrane formed of cellulose acetate, cellulose diacetate, cellulose triacetate, agar acetate, beta glucan acetate, polymeric epoxides, semipermeable polyurethanes, or semipermeable polyglycolic acid.
36. (New) The disposable diaper of Claim 21 further comprising a fluid transport element in fluid communication with the dehydration indicator and serving to transport the urine to the dehydration indicator.
37. (New) A disposable diaper comprising:
 - a liquid pervious topsheet;
 - a liquid impervious backsheet;
 - an absorbent core positioned between the topsheet and the backsheet; and
 - a dehydration indicator comprising a chemical indicating composition providing a visible signal indicative of a level of dehydration in response to an ionic strength of urine exuded into the diaper by a wearer, the visible signal forming an alphanumeric character indicative of the level of dehydration.
38. (New) The disposable diaper of Claim 37 wherein the visible signal is provided only when the ionic strength exceeds a predetermined threshold.
39. (New) The disposable diaper of Claim 37 wherein the dehydration indicator comprises a second chemical indicating composition providing a second visible signal only when the ionic strength exceeds a second predetermined threshold, the second visible signal forming a second alphanumeric character.

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40. (New) An absorbent insert adapted for use inside a disposable diaper and comprising:

an absorbent core; and

a dehydration indicator comprising a chemical indicating composition providing a visible signal indicative of a level of dehydration in response to an ionic strength of urine exuded into the insert by a wearer, the dehydration indicator further comprising an alphanumeric character.